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This paper presents a content analysis of North American art museum library websites. The exploratory study involves an analysis of the websites of twenty sample institutions to determine the overall scope, content, and features of their online sites. The results of the study show that art museum library websites contain detailed information about their institutions' collections, and often make aspects of their collections available to a wide range of online patrons in digital formats. However, many of these websites were found to be lacking in other key areas, such as online support, social media networking, research guidance, library promotion, and educational outreach. These components are important for the online representation of cultural institutions and can create bonds between the institutions and their patrons. For art museum libraries to successfully connect with and serve users in the 21st century, they should maintain websites that address all of these multifaceted online areas.

Headings:

Art Libraries and Collections

Art Libraries – Administration

Museum Libraries – Administration

Art Libraries – Technological Innovations

Museums – Planning

Content Analysis

A CONTENT ANALYSIS OF ART MUSEUM LIBRARY WEBSITES

by
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Introduction

Art museums throughout the world contain some of the most valuable objects of humanity's shared cultural past. These institutions are places created "to hold and preserve objects and texts, to expand the boundaries of public knowledge associated with those artifacts and words, and to open the possibilities of learning in the contexts of everyday life" (Carr, 2003, xiii). Today, many fine arts museums have associated research libraries that maintain their own important collections. These art libraries can play an equally important role in opening the possibilities of learning for patrons, since "librarians today do more than simply organize, provide, and interpret information... They transform users' experiences, collaborating with them along their path toward self-improvement.... While building collections and providing assistance remain significant, there is definitely an evolving shift toward this more proactive role for librarians as facilitators who not only change the way patrons use content but also aim to enrich their lives" (Mathews, 2009, 38).

While all art museum libraries' primary role is to support the collections and the exhibition activities of their respective museums, they are also markedly different and unique in many ways (Benedetti, 2007, 17). The missions and policies of art museum libraries differ greatly, from closed-stack institutions that can be visited by scholars through appointments only, to those that freely lend out their materials and place an emphasis on educating the general public about the arts through their collections. Many of these museum libraries also have a strong web presence, complete with online research

guides and a searchable library catalog. These are important developments, since today's patrons both expect content to be readily available online, and frequently explore museum collections from remote locations. Due to their unique position and role within art museums, museum libraries are ideal candidates to forge thematic collaborations between museums' visual image and object collections and library-based information resources. According to Carr, "thematic collaborations integrate museum collections and information resources in ways that stimulate both the presentation of content and the likelihood of independent discoveries among users" (Carr, 2006, 84). In this content analysis study, I will address the possibility of thematic collaborations through an analysis of the spectrum of online practices of art museum library websites. I will explore the libraries' websites to determine what types of content are displayed and identify the areas in which library websites can improve to more effectively address issues such as patron access, outreach, and education.

The previous research that informed the design of this study was drawn from a wide spectrum of literature. There have been many earlier studies done to determine the qualities and characteristics of art museums' institution-wide websites. These studies have examined the websites for such variables as design layout, user friendliness, and information content. There have also been several studies conducted on the role that general museum websites play in patron education and scholarly research. Likewise, there is a large body of literature on academic art libraries, art library websites, and the issues involved in the administration of art libraries in general. Since the field of study that directly addresses art museum libraries and their websites is somewhat more limited, I have used these earlier studies relating to art library websites and museum websites to

inform the current study. By gathering data on art museum library websites, I hope to shed some light on the current common practices employed by these specific institutions. Because of the exploratory nature of this study, I hope to provide suggestions and generalizations, rather than concrete conclusions, about the online presence of art museum libraries.

Literature Review

Art museum library websites are a unique resource for researchers and the general public alike, since they bridge the gap between one-of-a-kind art museum collections and the information resources needed for patrons to understand these objects and images. The increasing role of the Internet in this context means that a greater number of patrons can access library resources, but it also presents new challenges for museum librarians. As new technologies evolve, “museum information professionals face the challenge of integrating information resources to meet diverse user needs” (Marty, 2007, 102-103). However, often the simple practice of identifying these users and their needs becomes a challenge for museum librarians.

In a survey of the information-seeking behaviors of a study population that included students, teachers, and researchers, it was found that 34% of the population visited museum web sites at least once a month (Kravchyna and Hastings, 2002). While the specific information needs of the various groups within this study population may be very different, they expressed similar opinions about the type of content they hope to encounter on museum websites. For the users within this study, the definition of a “good” museum website was one that combined “well-produced general interest

information with full access to the whole collection” of the museum’s images and objects (Kravchyna and Hastings, 2002). From these responses, it is clear that online patrons use museum websites both for general information, as well as for the use of collection materials and images, regardless of their research goals.

Another important issue that must be addressed in the discussion of art museum library websites is the creation of original content. Based on the findings of Kravchyna and Hastings’ user survey, we can see that patrons hope to encounter general information about museum collections on the institutions’ websites. By combining library resources and informational expertise with a knowledge of image and object collections, art museum librarians can successfully provide this content for online users. In the adaptation of an information landscape dominated by print culture to one in which patrons increasingly demand online and digital resources, “librarians move from being purveyors of information to creators and communicators of content in global contexts and networked environments that seamlessly connect the real and virtual (Giannini, 2006, 80). This change has special implications for art museum librarians, who will encounter new roles and responsibilities that challenge them “to serve a public that increasingly expects a dynamic and interactive information landscape in museums and libraries” (Giannini, 2006, 80).

Museum Informatics has arisen as a scholarly discipline to address some of the issues involved in the interactions between people, technology, and information within museum settings (Marty, 2007). This field has addressed topics such as museum website design and usability and the information needs of museum website users in great depth. However, the content and scope of museum websites has not been studied in as much

detail. In the following four sections, multiple aspects of museum information practice are discussed in detail. These topic headings follow the divisions of variables explored in the content analysis of the twenty sample sites within the current study, and incorporate recent research in the field of museum informatics, as well as scholarship addressing the 21st century issues involved in the intersection of museums and technology.

Presentation: Website Functionality and Usability

There have been many studies that have highlighted the usability issues involved in museum website design. One such study by two Information Science researchers found that the artistic and visually engaging interfaces employed by museum web designers were a frequent source of confusion and disorientation to virtual visitors (Marty and Twidale, 2004). When users feel overwhelmed by these distracting elements or by too much content, which was another frequently cited source of frustration for web users, basic contact information becomes essential. Internet users must have the ability to contact a museum professional, as well as easily determine the scope and focus of each aspect of the site they are viewing. In a content analysis of art library websites done in 2006, Michalec found that while most art museum library websites listed the library's phone number and hours of operation, 40% did not list the library's address (Michalec, 2006, 51). Michalec found that these elements were important for users, since they enhance the credibility of the art museum library in the eyes of online patrons.

Clear organization of web content and well-labeled webpage links are also important to counteract the confusing nature of some museum websites. The importance of a clean site layout and well-organized content was reinforced in a usability study of art

museum websites done by Riley-Huff in 2009. She noted an estimated loss of 40% of potential repeat website visits when those visitors had “an initial negative experience caused by poor website design” (Riley-Huff, 2009, 83).

In Marty and Twidale’s study, the researchers found that despite the creation of rich content and the addition of digitized images and textual resources to museum websites, website users were often unaware of these aspects of the sites. They noted that usability issues “can mean users of the site will fail to discover and appreciate this rich content — a frustrating experience for both museum professionals and museum visitors” (Marty and Twidale, 2004). For example, if an art museum library website contains digitized image collections, archival materials, or artist files housed in the museum library, the site must clearly display the content, the search catalogs and archival finding aids necessary for users to access the content, or both.

Interactivity is another important aspect of art museum library website design. Due to their unique position as digital information hubs, museum websites have the opportunity to increase legitimacy and access to their visitors and participants with the addition of interactive exchange and collaborative media to their online environments (Riley-Huff, 2009, 91). These interactive elements may consist of blogs, discussion forums, and social folksonomy tagging of images or textual content, or any other type of user-generated web content. Another format of interactivity that may exist within the context of art museum library websites is instructional support. Website users often need support or feedback from librarians and other museum staff members. The provision of basic library contact information, including a librarian’s email address and phone number, may make users feel more comfortable in their initial exploration of facets of the

library's website if a need for online support arises. Chat reference, online email reference-based forms, or other methods of contact can also increase the level of interactivity of art museum library websites.

Collections: The Advantages and Disadvantages of Digital Content

Virtual museum visitors expect to get needed information about museum collections, and to interact with those collections in an online environment. In almost all studies of museum website use, patrons expressed the importance of quality digital collections. Kravchyna and Hastings note that patrons “assume that the museums they visit online will offer digital image collections full of paintings, artworks, historic illustrated manuscripts, photographs, drawings, and museum objects – including images of items that are not normally accessible” (Kravchyna and Hastings, 2002). Based on web analytics run by the Smithsonian Institution, it was found that the majority of hits to the Smithsonian Institution's library website are targeted at the website's digital collections. “About 93% of those visitors are coming from the general public and the vast majority of them are using the digital collections,” reports Martin Kalfatovic, Head of the New Media Office for the Smithsonian Institution Library (Primary Research Group, 2005, 19).

There are several advantages for art museum libraries to put digital content on their websites. Hemminger noted some of these advantages when he wrote that “having a digital copy of items or exhibits allows them to be accessed by anyone, at any time, from any place. It allows any number of people access at the same time. It preserves a nearly complete record of the object, which can be accessed without damaging the original”

(Hemminger, Bolas, and Schiff, 2005, 6). In addition, digitizing art museum library collections and making them widely available online minimizes more traditional public access problems, including limited access to materials based on prohibitive travel costs, the fragility of rare or fragile items, and the difficulties involved in the handling of culturally sensitive materials (Hemminger, Bolas, and Schiff, 2005, 5).

While making art museum and library collections available online in digital formats has many advantages, there are also some inherent problems associated with this practice. Often, museum website collection databases do not provide adequate educational and contextual information for online users (Kravchyna and Hastings, 2002). Taylor notes that “most museum collections mounted on the web have concentrated on providing digital approximations of items within their collections and supplementing these with very basic information generally available in a museum registration system or on curatorial worksheets. As such, these sites tend to mimic traditional models of presentation within the museum by focusing on the physical artifact (using a digital surrogate, which we now know is at best an approximation of the original item), only now decontextualized from the gallery setting” (Taylor, 2003, 117).

In order to mediate some of the problems users may encounter in viewing decontextualized objects and images on art museum library websites, supplemental educational or explanatory content written by museum librarians might be a highly valuable addition to these sites. In these additions, online museum visitors could encounter an informational context in which to understand works in a digital environment, just as they could encounter this type of context given to works in exhibits within the physical space of the museum. Varisco discusses the need for museums to

shift their traditional object-centered view of the museum visitor's experience to an information-centered experience, especially in the context of museum websites. Since the Internet has relatively unlimited space, while museum galleries do not, museums could add a wide variety of multimedia digital content to online collections of object images. In doing so, museum websites could supplement patrons' traditional experience of museum collections as individual objects to "a rich information experience, one possibly far better able to accommodate a larger human context than traditional, space-limited gallery narratives" (Varisco, 2011). This view has particular implications for art museum libraries, which, due to the varied and specialized nature of their collections and the professional information and research backgrounds of their staff members, are especially capable of adding such rich content to their online institutional websites.

Policies and Procedures: Issues of Access and Service

In a survey of museum website visitors, 48% of all users in the study population reported that they use museum websites for general research purposes; these numbers were even higher for teachers (62%) and museum staff members (60%), who more frequently use museum websites to conduct research (Kravchyna and Hastings, 2002). Additionally, 49% of all respondents, and 67% of teachers within the study sample, indicated that they use museum websites as sources to look for images related to their research interests. A similar study that analyzed the information-seeking practices of a sample population comprised of visual arts professionals, art teachers, and artists found that within the study population, close to 90% of respondents reported that they visited art exhibitions and museum sites on the Internet when looking for resources (Larkin,

2010, 58). These figures suggest that significant portions of researchers of all types and levels are turning to museum websites for valuable and trustworthy information.

To adequately address the information needs of these users, art museum library websites should ideally present Internet users with clear access to, and thorough coverage of, their unique and valuable collections. However, this need can present a challenge to art museum librarians since there is often a “tension between the art museum library’s mission to serve its own institutional needs and its role in meeting the art information needs of others”, such as the general public (Benedetti, 2007, 18).

In her article about the differences between libraries, archives, and museums, Wyeth notes that while issues of access and levels of service to patrons have always been at the forefront of library and archives research and discourse, the same cannot be said for museums, since there are no widely-adopted standards within the museum profession that address the issues involved with public access to collections (Wythe, 2007, 53). In the context of art museum websites, this raises several issues. Web users are more likely to be guided through elaborate but fixed online exhibits, rather than simply provided with access to a catalog of museum collections where they can find and interpret materials according to their own needs and whims (Wythe, 2007, 53). Archives are increasingly giving users access to finding aids, but this trend has not been fully adopted by art museum archives, where patron access to archival collections is not as extensive or complete (Wythe, 2007, 53). For example, in a content analysis of art library websites, only 76% of museum sites were found to contain a searchable online catalog for library collections, illustrating the slower adoption of this practice for these types of institutions (Michalec, 2006, 49).

As museums begin to embrace their role as cultural repositories with valuable collections, and adopt library and archival techniques for making these collections more widely available to the public, “there has been increasing momentum to provide access to collection catalogs through the web as more and more museums are creating digital representations of their holdings” (Wythe, 2007, 54). In the case of art museum library websites, this access may involve the incorporation of a searchable catalog that includes the library’s holdings, encoded and searchable online finding aids for any collections of archival materials in the library’s collection, and possibly even searchable, digitized surrogates of special collections materials like artist files or other rare ephemera.

Another important part of access within art museum library websites involves the presence of clearly articulated library policies and procedures. Online search catalogs and archival finding aids are a wonderful addition to art museum library websites, but these additions may be confusing to some users if they are not accompanied by guides or tutorials explaining their coverage and functionality. In other words, “a site that says it has a library but does not offer basic information about how it operates is of no use to anyone” (Trump, 1997, 47).

In a study of the websites of online visual resources collections (VRCs), Bergstrom found that although most websites provided information about the institution’s physical and digital resources, “many neglect to provide information about the knowledge and resources offered by their staff, such as assistance with using image collections or image reference services”, which can be problematic when the collections involved are of a highly specialized nature, such as in art museum libraries (Bergstrom, 2009, 29). If universal access to all library materials is not available for the general public, it is

important for the library website to make note of its institutional restrictions. This may include a discussion of circulation policies, reading room policies and procedures, and general collection use policies. In addition, art museum library websites may offer additional guides or tutorials targeted towards the general public that cover popular topics, such as guides for researching works of art in the collection or information on how to get a work of art appraised by a local professional.

Education, Outreach, and Promotion: Remaining Relevant

In today's uncertain economic climate, art museums, libraries, and other cultural institutions are frequently being asked to justify the continuation of their funding from state and national governmental organizations. Museums have sought to maintain their support and cultivate financial sponsorship through partnerships with schools, colleges, and outreach organizations that focus on education initiatives. Not only do these initiatives help museums fulfill their goals of reaching out to patron communities and supporting the education of the general public, but they also help to increase awareness of the importance of cultural institutions and their collections.

One way in which art museums and other cultural institutions have sought to broaden their educational initiatives and outreach to patrons is through the use of museum websites and other collaborative technologies. At their heart, museums are educational institutions. Most share a common mission to educate the public- their patrons- through the use of their collections and resources (Varisco, 2011). Art museums seek to fulfill their educational purposes by connecting with these patrons, many of whom are students, teachers, and researchers who visit museums to achieve educational

goals. While traditionally, meeting these educational goals has entailed traveling to a museum to visit its physical location and view its collections, limits on field trip funding, arts programming, and other considerations have made visits to a museum difficult in recent times, especially for K-12 schools (Varisco, 2011). Due to these issues, the Internet and the use of digital formats for viewing museum collections have become increasingly popular. As budget cuts for K-12 schools increase and limitations on funding for arts programs continues, the popularity and use of digital museum-related content is also likely to increase (Choi and Piro, 2009, 28). For this reason, art museum library websites are uniquely poised to bridge the gap between the need for K-12 art education programs and resources and the increasing inability for school groups of students and teachers to physically visit museum galleries. Since the primary role of art museum libraries is to support the mission of their umbrella institution, they can play a valuable role in the educational interchange with schools and universities. As one scholar in the field has noted, “teaching and learning with collections provides an important complement to other library instructional programs” (Aurand, 2011, 18). Art museum libraries can participate in this aspect of learning through the use of their unique and rare materials, which can be a great asset for use in teaching programs and initiatives. These materials could be especially useful in online digital environments, since “their content may be difficult to obtain or fully appreciate in other formats, and their artifactual qualities bring authenticity to learning” (Aurand, 2011, 18).

Furthermore, as noted by several experts in the field, today’s students are expected to develop a wide variety of technical skills and information literacies, such that even in fine arts education, computers are being integrated into almost every learning

activity (Mayo, 2007, 48). Art museum library websites are ideal vehicles to assist in this transition, since they frequently present digital versions of gallery exhibits, and increasingly allow users to interact with the visual content by manipulating it in some way, such as through the use of Web 2.0 technology like folksonomy tagging, wikis, and other forms of multimedia. Unlike Web 1.0, which has been characterized as “housing a set of products and commodities that were created at a source and then made available to users”, Web 2.0 technologies form “a socially rich and democratic type of web that encourages user participation”, in which “the new and emergent features of the social web are created and maintained by the users themselves, and through iterative use, the artifacts actually improve in quality and gain deeper relevance for the group” (Wheeler 2009, 4).

Collaborative Internet technologies on art museum library websites are especially suited to arts education, since they allow web users to create new content in a social dimension. “Because art is inherently about creating, using Web 2.0 to create offers artists, art teachers, and art students a new medium” with which to explore art museum collections and library materials (Buffington 2008, 40). This digital interaction allows users to become “active participants in their learning through manipulating authentic objects in a stimulating setting,” akin to the same experience created by visiting the physical museum (Wishart and Triggs, 2010, 670). This type of interactive learning not only aids in the development of 21st century learning skills valued in today’s educational field, but also helps museums to satisfy goals that help these types of cultural institutions maintain their funding and public support. Art education research has shown that successful educational web sites contain both textual and nontextual tools for users to

explore (Choi and Piro 2009, 31). This is especially important for art museum library websites, which should reflect the visual nature of their institutions' collections by ideally showcasing both images and digitized content. Art museum librarians and museum educators are important intermediaries within the relationship between museum collections and K-12 learners since their role is to "bring visitors to a greater understanding of works of art" and to "act as the agents through whom aesthetic experiences can occur" (Blume, 2008, 88). Art museum library websites can enhance this role, since librarians bring a unique viewpoint to museum education that successfully incorporates textual resources and other educational materials into traditional museum collection education initiatives.

The promotion of collections and services is a key issue for all cultural institutions, including art museums and their associated libraries. In addition to the educational and outreach-based values associated with art museum library websites, the library website can play a significant role in institutional promotion. Promotion of the museum and its library on the library's website may take the form of news updates about recent collection- and book-related acquisitions, updates about the opening of museum exhibits, or advertisements of library events and general educational programs within the museum. As one art museum librarian reported, the art library at her institution often becomes the focus point for the dissemination of information about museum exhibits, gallery programs, and educational initiatives (Giannini, 2006, 81). This reflects the traditional vision of the library as an access point for patrons to encounter all types of information. In her study of museum website users, Kravchyna found that 87% of the study population used museum websites get information about museum events, while

68% of visitors to the websites looked for information about recent and upcoming museum exhibits (Kravchyna and Hastings, 2002). When Internet technology is embedded in museum programs that link librarians, curators, and educators in collaborative ways, this access point becomes the art museum library website, rather than the physical library itself. Research has shown that even when consulting the institutions' web site for information, patrons still look to the library for information about the museum as a whole (Giannini, 2006, 81).

Methodology

In this research study, multiple aspects of art museum library websites were analyzed through the use of content analysis. This methodology is suitable for the study, as it allows for the systematic measure and analysis of recorded human communication, which in this case takes the form of Internet websites (Babbie 2007, 320). It also allows the researcher to uncover "patterns that have a high degree of commonality" (Krippendorff 2004, 50). Specifically, content analysis was used in this study to address the goals of describing trends in the communication content of art museum library websites, to disclose differences in the websites' content, and to potentially aid in the construction of communication standards for the library websites (Krippendorff 2004, 45). Manifest, rather than latent, content analysis was utilized in this study, since manifest analysis focuses on concrete and observable variables that are easily measured by either their presence or absence (Neuendorf, 2002, 23).

In order to determine the patterns of common attributes and general content standards of art museum library websites, several key elements and markers of content

were identified and developed into a codebook (see Appendix B). These markers were developed based on the literature and previous museum website design evaluations, as well as earlier content analysis and user survey studies, such as those done by Michalec, Bergstrom, Larkin, and Kravchyna and Hastings. These eighteen variables were divided into four categories, each of which addressed a different aspect of art museum library websites: Presentation; Collection Formats and Materials; Procedures and Policies; and Outreach, Education, and Promotion. Within each category, different questions were asked that addressed each variable. For example, for the Presentation category, one of the variables measured was the presence or absence of a searchable online catalog for the art library's collection. To measure this particular variable, the question "Does the website have a searchable online catalog?" was asked for each website involved in the study.

In accordance with recommended best practices for the application of content analysis, the codebook was tested and revised as necessary before being applied to each website within the study in order to create a set of complete and unambiguous variable definitions (Neuendorf 2002, 132). Basic measures were also taken to minimize individual differences in the coding of websites within the sample. The researcher personally did all of the content analysis within the same one-week period, using the same computer and Internet browser, as well as the same search techniques.

The measurement results of each of the eighteen variables considered within the content analysis was recorded in an Excel spreadsheet. In compliance with the methodology of manifest content analysis, only information that was clearly observable on the art museum library's website was recorded in the spreadsheet. In some cases,

information that appeared on a webpage of the umbrella institution or affiliated archival institution and was linked-to from the library page was included, if it was considered clearly marked from the main library website.

In order to perform a content analysis on art museum library websites that could generate valid and meaningful results, a random sample of twenty institutions was chosen. Random selection of units for analysis ensures that “a content analysis is generalizable to some population of messages” (Neuendorf 2002, 83). The sample was developed following the framework outlined by Krippendorff, in which the sampling units to be included in the content analysis were first enumerated, and a randomization device was then applied to the enumerated list to determine which units would be analyzed (Krippendorff 2004, 114). The sampling frame used for the study was the membership list of institutions belonging to the Association of Art Museum Directors (AAMD), which represents major art museums in the United States, Canada, and Mexico. The AAMD’s mission is to “promote the vital role of art museums throughout North America and advance the profession by cultivating leadership and communicating standards of excellence in museum practice” (Association of Art Museum Directors, 2011). This population was chosen due to its broad level of membership, which encompasses a wide variety of art museums of all sizes and collection levels in North America, as well as its notoriety for including prestigious institutions that stand at the forefront of the museum field and exhibit high standards of professional practice.

The AAMD defines art museums as “non-profit institutions primarily concerned with the exhibition of works of art, a professional staff and an annual operating budget equivalent to or exceeding \$2 million for two consecutive years” (Association of Art

Museum Directors, 2011). This operational definition was useful for the current study, in that it provided a convenient sampling frame of institutions that had affiliated art libraries committed to both scholarly research practices and the transmission of visual materials and art information resources to the general public. In order to generate a random sample of twenty art museum libraries for the current study, consecutive numbers were first assigned to the list of the AAMD's 199 member museums. The online Random Number Generator maintained by Trinity College's School of Computer Science and Statistics in Dublin, Ireland was then utilized to pick twenty random numbers between one and 199. These twenty numbers were then matched with their corresponding institution on the AAMD's list to obtain the study sample.

In two cases, the Random Number Generator picked numbers corresponding to Mexican museums with websites in Spanish that could not be translated by the researcher. These random number assignments were discarded, and the Generator was again used to choose two different, additional institutions to form the sample size of twenty museum libraries. Of the twenty sites chosen for the final sample, all but one of the sites' museum libraries maintained a website. The Felix J. Dreyfous Library of the New Orleans Museum of Art does not have a website; however, this institution was kept in the sample as a valuable aspect of the study population. In the content analysis codebook, the data for this site was coded as missing, and was excluded from statistical considerations in the final analysis of the data.

Results and Discussion

The results of the content analysis of art museum library websites show that there is

a wide range of current online practices associated with these institutions, and that none of the institutions' websites contained all of the information variables searched for in the current study. This finding has implications for the future design of art museum library websites, since art museum librarians can reach more patrons and perform services more successfully by adding the missing elements to their online sites. Many art museum libraries' websites have similar levels of information and types of content, but there is also great variety among the websites of the institutions studied, which may reflect differences in the institutions' missions, size, collection formats and materials, or patron policies.

Presentation

Most of the art museum library websites within this study contained similar levels of basic information about their institutions. The findings in this section suggest more uniformity among the websites concerning the types of basic information presented than in other aspects considered in the content analysis. All but one of the institutions in the randomly chosen study sample had a website. The Felix J. Dreyfous Library at the New Orleans Museum of Art did not have any web presence of its own distinct from the art museum's general website. Of the remaining nineteen art museum library websites studied, 89% were clearly marked and linked-to from their parent art museum's website.

A total of 89% of the websites also listed all of the art museum library's contact information, including location, operating hours, phone number, and email address. When contact information was not included on the website, it was usually missing for a particular reason. For example, one of the institutions that did not list library contact

information on the website was the Isabella Stewart Gardner Museum Library and Archives. This particular institution's library is closed until January 2012, so patrons cannot physically access the library or archival collections until then. The high level of websites that provide full contact information for their library suggests an improvement from the findings of previous studies, since in an earlier study of art museum library websites, Michalec found that a full 40% of the websites did not list the library's address (Michalec, 2006, 51).

Providing patrons with general information about the library's collection is very important, especially for institutions like art museum libraries, which have highly focused and specialized collection materials. This aspect of information presentation was included in 100% of all websites studied in the content analysis, since all of the sites contained an overview of the scope of the library's collections. In the current study, it was found that 79% of art museum library websites contained a searchable catalog of the library's collection. This statistic closely matches with the findings from the 2006 content analysis study, where 76% of art museum library websites were found to contain a searchable online catalog (Michalec, 2006, 49).

While the majority of sites have a catalog to allow patrons to search library holdings, far fewer websites contained searchable archival finding aids to allow online users to locate and search these materials. In the current study, only 37% of art museum library websites were found to contain searchable online finding aids when archival materials were included in the library's collections. This may reflect the lower levels of use of museum archival collections, since the majority of online patrons of museum websites are looking for general information, rather than specialized research sources.

Also, many art museum libraries simply do not have the time and resources to encode finding aids, and may instead focus on other tasks that are higher institutional priorities. Some of these finding aids were included on the library's website in the discussion of archival collections, but others were separated. For example, the John D. Rockefeller Jr. Art Research Library at Colonial Williamsburg has significant archival collections. The finding aids for these collections are available as downloadable PDFs, but are not embedded within the archives page of the library website. One institution within the study that had a high level of information about the library's archival collections is the Philadelphia Museum of Art Museum Library. This institution's website not only contained searchable, encoded finding aids for patrons to explore and access archival collections, but it also contained helpful definitions of archival terms and archives' policies and procedures as well.

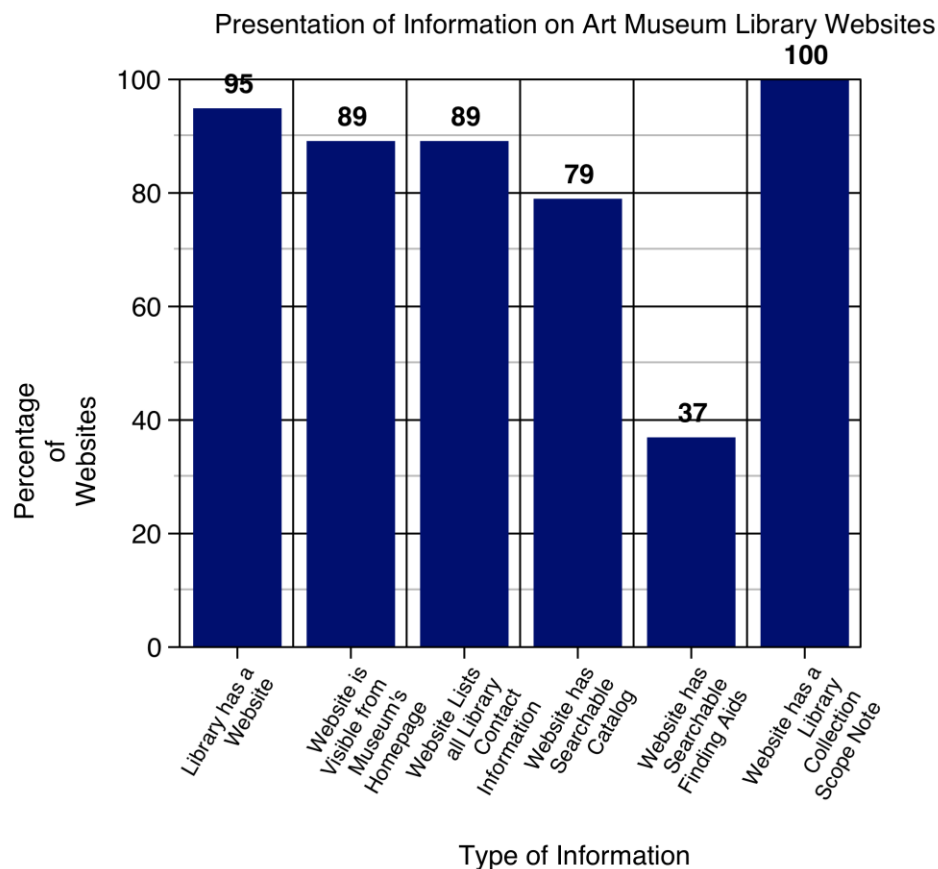


Figure 1

Collection Formats and Materials

While many of the art museum library websites studied contained similar levels of information about their institutions, the institutions themselves differed greatly in terms of their sizes and collections. Of the art museum libraries within the sample population that had websites, 16% did not specify the number of print volumes in their collection. 21% had fewer than 20,000 volumes in their collections; 26% had between 20,000 and 50,000 volumes; 5% had between 50,000 and 100,000 volumes; 5% had between 100,000 and 150,000 volumes; 16% had between 150,000 and 200,000 volumes; and 11% had over 200,000 print volumes in their collections. These numbers show the wide variety of

sizes of art museum libraries analyzed within this study.

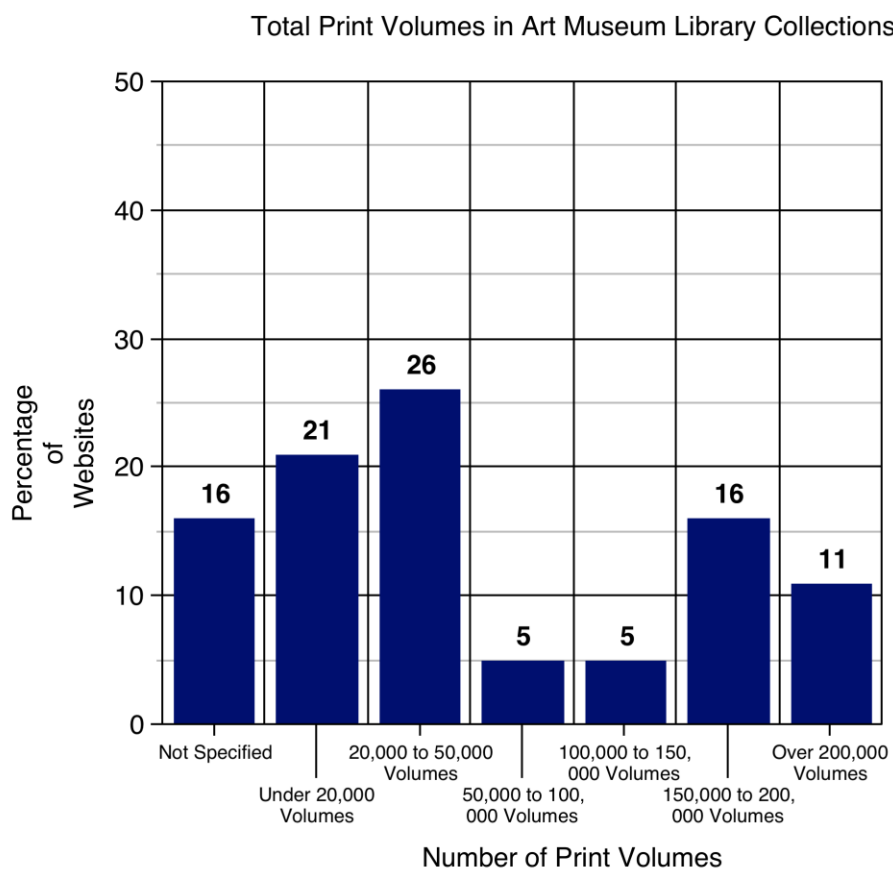


Figure 2

In general, the art museum libraries in the study sample that have very large collections, such as the Ryerson and Burnham Libraries of the Art Institute of Chicago (the third largest art research library in the United States), the Philadelphia Museum of Art Museum Library, the Smithsonian American Art and National Portrait Gallery Library, and the Frick Collection Art Reference Library, tended to have the most information and content available on their websites. Smaller art museum libraries, such as the Louis T. Griffith Library at the Georgia Museum of Art and the Montgomery Museum of Fine Arts Library, each of which have collections of 5,000 print volumes, had less information and content available on their library websites.

The sites in the study sample also differed in the types of collection formats and materials they maintain. Of the institutions studied, 73% of art museum libraries had archival materials in their collections, and an additional 11% were connected to an institutionally affiliated museum archive that was separate from the museum library itself. Many previous studies have found that museum website users highly value the presence of digitized content on online museum sites. However, in this study, it was found that only slightly more than half of the sites (58%) placed digital images or content on their websites.

The digital content encountered on art museum library websites in the current study varied greatly from site to site. Many of the libraries' websites explained that the institutions were in the process of undergoing large scale digitization efforts, and would gradually make digital content available on the website over time. Art museum libraries with current digitization projects and online content within the study sample include: the Isabella Stewart Gardner Museum Library and Archives' online collection of Isabella Stewart Gardner's travel diaries and scrapbooks; the Indiana Museum of Art Stout Reference Library's collection of digitized museum exhibition records; the Smithsonian American Art and National Portrait Gallery Library's online digital repository of Smithsonian staff publications and ephemera; the San Diego Museum of Art Library and Archives' online database of art-related research pathfinders; and the Yale Center for British Art Reference Library and Archives' digital collections. This particular institution's website contains tutorials and research guides for using the digital collections, and also contains a catalog that searches across all of the website's online content. The website also specifies how much content from the library and archives has

been digitized by the institution and is currently available online (Rare Books & Manuscripts: 50% available; Reference Library: 100% available; Archives: 0% available).

Some of the most important aspects of art museum library holdings are these institutions' collections of artist files. As one scholar has noted, "artist files are among the most valued and heavily used resources in art research facilities. These files often provide critical documentation about well-established artists, as well as lesser-known artists not well documented in the literature. Researchers rely on artist files to establish chronologies, flesh out exhibition histories, review stylistic developments and assess the critical reception of artists over time... Ironically, artist files are among the least accessible resources in research collections" (ARLIS N/A, 2010). Due to the importance of these materials, the issues of patron access related to them, and the fact that they are not circulated because of their unique and irreplaceable natures; these files are ideal candidates for digitization and online display on art museum library websites.

Three of the art museum library websites within the current content analysis study maintained some level of online access for patrons to search and use collections of artist files. The Smithsonian American Art and National Portrait Gallery Library's website maintains an online database of digitized, searchable artist files, representing a high level of patron access to this type of collection. The Portland Art Museum's Crumpacker Family Library website does not contain digitized or searchable artist files, but it provides highly detailed explanations of the content and materials held in the library's Northwest Artists files. On the lower end of the spectrum of online patron access to artist files is the National Museum of Wildlife Art Museum Library and Archives. This library's website

does not contain any digitized content from within their collection of artist files, but it does contain over 200 artist bibliographies that include artists whose works can be found in the museum galleries. These three institutions represent multiple levels of access within the growing trend “for art museum libraries with artist files or other ephemera collections to digitize the materials, catalog them, create searchable databases for them, and make them freely available to researchers and the general public on museum library websites, since art museum libraries and their patrons know the value of these resources” (Benedetti, 2007, 131).

Procedures and Policies

The current study found that the greatest variety in the content of art museum library websites involves the presence and type of information related to library policies and procedures. Most of the sites within the content analysis specified that the general public was welcome to visit library facilities and use library collections. However, among these sites, 58% mentioned that library visitors must be affiliated with a research institution or must be performing art historical research on topics directly related to art museum and library collection areas. Since they are primarily scholarly research institutions, most of the art museum libraries (63%) do not circulate their collections. 16% of the institutions studied do allow patrons to borrow materials, and 21% did not specify their lending practices on the library’s website.

The Helen Ecclestone Stone Library at the Vero Beach Museum of Art was one of the few art museum libraries in the study sample that does allow patrons to borrow materials. This library’s website did not contain any content, digital collections, or

educational materials, but it does mention that “the Library collection is available to all Museum visitors for browsing or research. Lending privileges for books, catalogues and periodicals are exclusive to all Museum members”. The presence of these policies on the library’s website reflects the institution’s mission, which is to provide a valuable collection of art books and art-related DVDs for all to use. Other art museum libraries within the current study have different policies displayed on their websites, which are more suited to their particular institutional mission and focus. For example, the website of the Menil Collection Library contained no online content, policy descriptions, or collection guides. However, this library is open to qualified researchers by appointment only, so the website is tailored to scholars who visit the library and archives in person.

Due to the complex nature of art museum library collections and services, a key piece of information patrons expect to encounter on library websites is an explanation of library use restrictions and general policies and procedures, as well as patron support features such as email reference forms or collection guides and tutorials. Despite the importance of presenting this type of information, less than half (42%) of the websites analyzed provided explanations of library collection use policies, procedures, and/or restrictions. Similarly, only 26% of library websites provided methods of online support to patrons, most commonly through email reference forms. In the current study, art museum libraries with websites that include online reference and email forms tailored for patrons to contact museum librarians are the Frick Collection Art Reference Library, the Philadelphia Museum of Art Museum Library, the John D. Rockefeller Jr. Library at Colonial Williamsburg, and the Smithsonian American Art and National Portrait Gallery Library.

Many online users visit art museum library websites for information on using the collection or to do general art research. However, only 21% of the websites studied included online guides or tutorials to educate patrons about using the library's collections or about how to do general art historical research. Of the websites that did include tutorials or guides on their websites, most were targeted towards instructing online patrons on the use of the institution's collections. Other art museum library websites in the study population contained more general guides. For example, the website of the Ryerson and Burnham Libraries at the Art Institute of Chicago contains online research guides that address how to do general research on art and artists, how to appraise and conserve works of art, how to do provenance research, and how to research a work in the museum's collection. The website of the Philadelphia Museum of Art Museum Library also contains unique research guides on topics involving artwork provenance research and the repatriation of wrongfully stolen artwork from various European collections by Nazis during World War II.

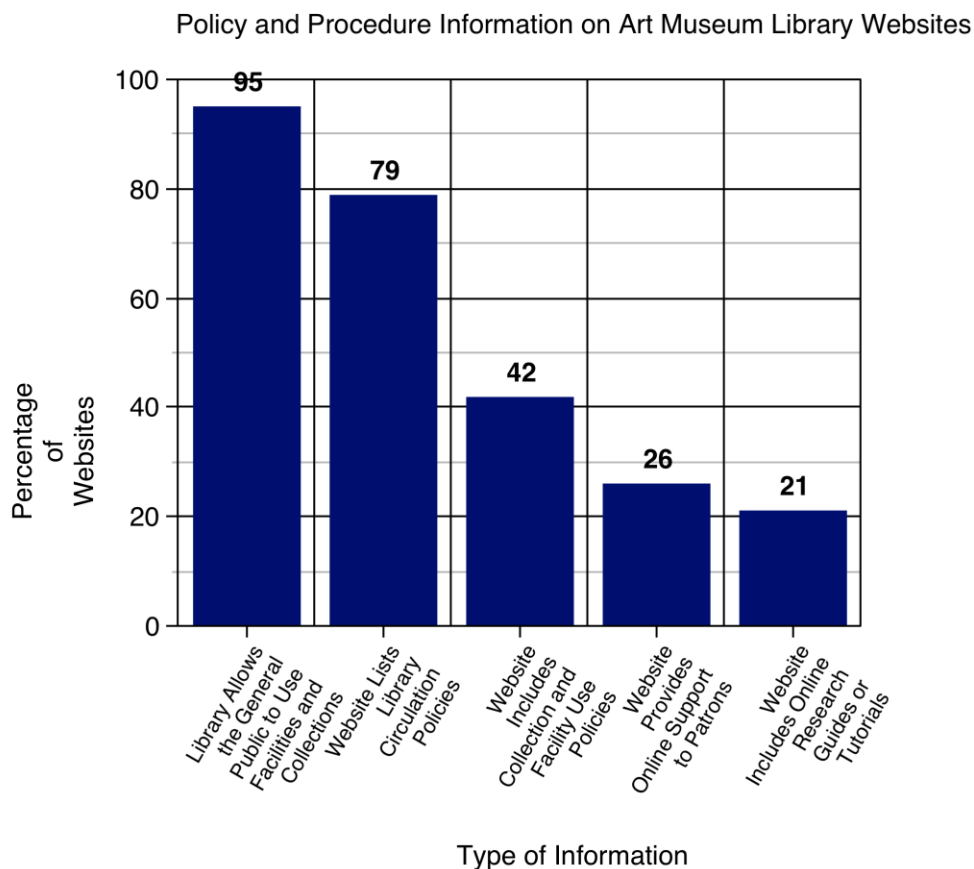


Figure 3

Outreach, Education, and Promotion

The importance of information related to art museum library outreach and promotion has been frequently discussed and demonstrated in the literature. However, the results of the current study show that art museum library websites can do much more to fulfill the needs of these areas. The content analysis showed that only 16% of art museum library websites contain advertisements for library programs, exhibits, or events. These websites, which include the sites for the Smithsonian American Art and National Portrait Gallery Library, the John Ringling Library at the Ringling Museum of Art, and the Wolfsonian Museum of the Wolfsonian Collection, advertise mainly for new book

acquisitions and exhibitions of rare or special materials within the library's collection.

Today's online users expect to encounter information and be able to share it in collaborative and social ways, as evidenced by the growing influence of social media in all types of online environments. However, a mere 5% of websites in the current study were found to utilize and link to various forms of social media. While only one art museum library website (the John Ringling Library at the Ringling Museum of Art) within the study sample linked to different forms of social media, several websites of the libraries' parent museums, such as the Portland Museum of Art and the San Diego Museum of Art, included social media icons on their websites. By including these icons on the pages of the libraries' specific websites, art museum libraries could increase patron access to and knowledge of library collections, as well as more successfully promote library events and services to the general public.

Similarly, the current study found that just 21% of art museum library websites utilize Web 2.0 technologies such as blogs, wikis, or social folksonomy tagging. Both the John Ringling Library at the Ringling Museum of Art and the Mint Museum of Art Library maintain library blogs that are separate from those of their parent museum websites (the Mint Library also has a separate wiki). These blogs were last updated in August 2011 and January 2011, respectively, showing that the maintenance of online social content is not an especially high priority for these art museum libraries. This is consistent with the findings of a previous research study of museum library blogs, which found that several museum libraries start up Internet blogs but do not regularly maintain them (Spadaccini, 2006, 2). The content of the Ringling Library's blog and the Mint Museum Library's blog are also consistent with the findings of the 2006 study, which

noted the wide variety of informational posts found on museum library blogs, including recent book acquisitions, library news, general museum updates, and highlights of rare or unique items within the museum library's collections, as well as more in-depth educational posts about works of art in museum collections (Spadaccini, 2006, 7).

Educational materials are equally important aspects of art museum library websites, since the majority of museum website patrons are teachers and students looking for information related to their research interests. In addition, general online users frequently look for educational content related to art museum collections and images on library websites. Art museum libraries can provide this type of content in unique ways, which not only helps website users find what they are looking for, but also helps the institution satisfy its mission to educate the public. However, the results of this content analysis study show that few art museum library websites display this type of content, since only 37% of the websites contain educational outreach materials. Some of the institutions within the study population that did provide educational materials on their library websites include the John D. Rockefeller Library at Colonial Williamsburg and the Mint Museum of Art Library.

The John D. Rockefeller Library website contains a wealth of information for students and other online patrons hoping to learn about a variety of topics related to Colonial Williamsburg and American History in general. The website has online research sources, databases of library materials, images of and textual explanations of historical time periods and events, and links to additional online resources on topics like archaeology, historic trades, and the decorative arts. All of these resources would be helpful for students, teachers, and researchers looking for valuable and reliable

information within these areas.

The Mint Library's website itself does not contain educational content, but it links to the Mintwiki, an educational PB Works wiki created and maintained by the staff of the Mint Museum Library. While it is a separate website, the Mintwiki has the same look and feel as the rest of the Mint Museum's website. In addition, the wiki contains links to help patrons return to both the museum homepage and the museum library website, which makes it seem like a continuation of the main website. The Mint Museum Library's wiki contains a large amount of educational content, including biographies of artists represented in the museum galleries, information related to past and present exhibits, and general background information about art historical time periods and movements. The wiki posts also incorporate newspaper reviews of museum exhibits, interviews with artists, audio and film clips related to the wiki's content, and links to additional online information sources. Like the resources on the website of the John D. Rockefeller Library at Colonial Williamsburg, the Mintwiki maintained by the Mint Museum Library is an excellent resource for online patrons of all types and education levels, and allows the general public to access the collections and expertise of this art museum library from remote locations.

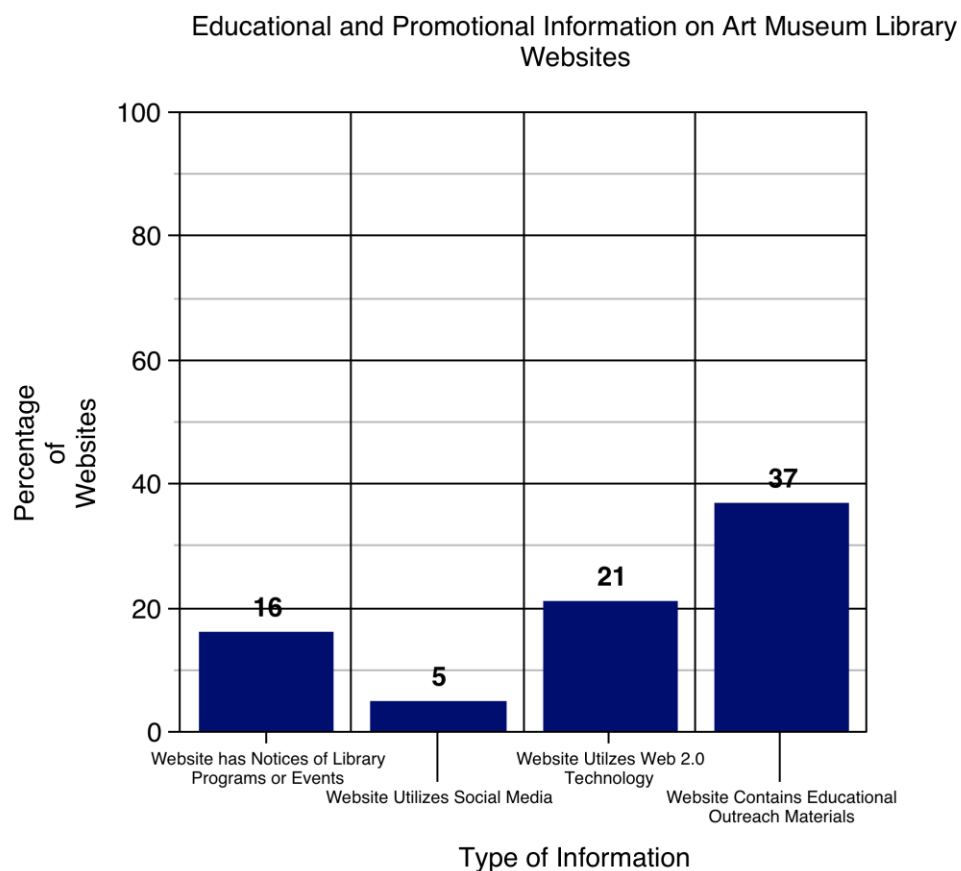


Figure 4

Conclusion

This paper presented a content analysis of North American art museum library websites. The exploratory study involved the analysis of the websites of twenty sample institutions chosen from the Association of Art Museum Directors' list of 199 member institutions to determine the overall scope, content, and features of the online sites. The results show that there is a wide range of current online practices associated with art museum libraries, and that none of the websites of the institutions within the sample population contained all of the information variables searched for in the current study. The results of the content analysis showed that art museum library websites frequently

contain detailed information about their institutions' collections, and often make aspects of their collections, such as artist bibliographies and files, images, and educational content, available to a wide range of online patrons in digital formats. However, many art museum library websites were found to lack online content and information in other key areas, such as online support, social media networking, research guidance, library promotion, and educational outreach. All of these areas are important for the successful online representation of art museum libraries, since they increase patron access to library collections and services, and also help libraries meet their goals of serving the educational needs of the general public.

For art museum libraries to successfully connect with and serve a wide range of patrons in the 21st century, they must maintain websites that contain the online presentation of basic information about the library, information about library collections and digital content, information about library policies and procedures, online materials for patron education and outreach, and social media tools that aid in the promotion of library collections, events, and services. However, in the current climate of budget cuts and limited staffing, art museum libraries in particular face challenges to implementing these standards. The fact that nineteen out of the twenty institutions surveyed in the current study had some form of online presence speaks to the perceived importance of this form of patron service and outreach.

At a minimum, art museum librarians should spend some of their limited time and resources to develop simple websites that are incorporated into the main site of their parent institution. These sites should list all the contact information for the art museum library, a brief note describing the scope and focus of the library's collection, and a link

to the library's catalog (if available online), for patrons to perform basic searches within the collection. Publishing this type of information online would not require much time or effort for librarians yet could go a long way towards increasing the general public's knowledge of and use of these types of research libraries. With additional resources, art museum librarians could add educational content, research guides, and news updates concerning library events, exhibitions, and new acquisitions to the art museum library website. These materials could be supplemented and added to over time, further increasing the positive impact of the art museum library's website in terms of patron access and service. The findings of this study have implications for the future design of art museum library websites, since by adding content and information in underrepresented areas, art museum libraries can reach more patrons and perform services more successfully through their online sites.

Bibliography

The Artist Files Working Group, ARLIS N/A. Files Revealed: Documentation and

Access. <http://www.arlisna.org/pubs/onlinepubs/index.html>.

Association of Art Museum Directors. About AAMD. <http://www.aamd.org/about/>.

Aurand, Martin. 2001. Teaching and Learning with Collections: The Library as a Site for Exploration and Inspiration. *Art Documentation* 30, no. 1 (Spring): 12-20.

Babbie, Earl R. 2007. *The Practice of Social Research*, 11th ed. Belmont, CA: Thomson Wadsworth.

Benedetti, Joan M., ed. 2007. *Art Libraries and Librarianship*. Lanham, MD: Scarecrow Press.

Bergstrom, Tracy. 2009. A Content Analysis of Visual Resources Collection Web Sites. *Art Documentation* 28, no. 1 (Spring): 29-33.

Blume, Nancy, et al. 2008. Looking to Learn: Museum Educators and Aesthetic Education. *Journal of Aesthetic Education* 42, no. 2 (Summer): 83-100.

Buffington, Melanie L. 2008. What is Web 2.0 and How Can It Further Art Education? *Art Education* 61, no. 3 (May): 36-41.

Carr, David. 2006. *A Place Not a Place: Reflection and Possibility in Museums and Libraries*. Lanham, MD: Rowan and Littlefield Publishers.

- Carr, David. 2003. *The Promise of Cultural Institutions*. Walnut Creek, CA: AltaMira Press.
- Choi, Haeryun, and Joseph M. Piro. 2009. Expanding Arts Education in a Digital Age. *Arts Education Policy Review* 110, no. 3 (Spring): 27-34.
- Giannini, Tula. 2006. Competencies for Art Museum Librarianship, in *Core Competencies and Core Curricula for the Art Library and Visual Resources Professions*. Kanata, Ont.: Art Libraries Society of North America.
- Hemminger, Bradley, Gerald Bolas & Doug Schiff. 2005. Capturing Content for Virtual Museums: From Pieces to Exhibits. *Journal of Digital Information* 6, no. 1 (Winter): <http://journals.tdl.org/jodi/article/viewArticle/61>.
- Kravchyna, V., and Hastings, S. K. 2011. Informational Value of Museum Web Sites. *First Monday* 7, no. 2 (February): <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/929/851>.
- Krippendorff, Klaus. 2004. *Content Analysis: An Introduction to its Methodology*, 2nd ed. Thousand Oaks, CA: Sage Publications.
- Larkin, Catherine. 2010. Looking to the Future While Learning from the Past: Information Seeking in the Visual Arts. *Art Documentation* 29, no. 1 (Spring): 49-60.
- Marty, Paul F. 2007. The Changing Nature of Information Work in Museums. *Journal of the American Society for Information Science and Technology* 58, no. 1 (January): 97-107.

- Marty, Paul F. and Michael B. Twidale. 2004. Lost in Gallery Space: A Conceptual Framework for Analyzing the Usability Flaws of Museum Web Sites. *First Monday* 9, no. 9 (September): <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1171/1091>.
- Mathews, Brian. 2009. Libraries & the Inspiration Business. *Library Journal* 134, no. 11 (June): 38.
- Mayo, Sherry. 2007. Implications for Art Education in the Third Millennium: Art Technology Integration. *Art Education* 60, no. 3 (May): 45-51.
- Michalec, Mychaelyn. 2006. A Content Analysis of Art Library Web Sites. *Art Documentation* 25, no. 2 (Fall): 46-54.
- Neuendorf, Kimberly A. 2002. *The Content Analysis Guidebook*. Thousand Oaks, CA: Sage Publications.
- Primary Research Group. 2005. *Creating the Digital Art Library*. New York, NY: Primary Research Group.
- Riley-Huff, Debra A. 2009. Design Insights and Inspiration from the Tate: What Museum Web Sites Can Offer Us. *Portal: Libraries and the Academy* 9, no. 1 (January): 79-98.
- Spadaccini, Jim. 2006. Museums 2.0: A Survey of Museum Blog Sites & Community-Based Sites. *Ideum: Ideas + Media*. (March): <http://www.ideum.com/blog/2006/03/a-survey-of-museum-blogs-community-sites-2/>.
- Taylor, Bradley L. 2003. Enhancing the Value of Museum Web Sites. *Journal of Library*

Administration 39, no. 2-3 (September): 107-122.

Trump, Polly. 1997. Content Guidelines for Art Museum Library Web Pages. *Art*

Documentation 16, no. 2 (Fall): 44-50.

Varisco, Robert A. and Ward M. Cates. 2005. Survey of Web-Based Educational

Resources in Selected U.S. Art Museums. *First Monday* 10, no. 7 (July):

<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1261/1181>.

Wheeler, Steve. 2009. *Connected Minds, Emerging Cultures*. Charlotte, NC:

Information Age Publishing.

Wishart, Jocelyn, and Pat Triggs. 2010. MuseumScouts: Exploring how Schools,

Museums and Interactive Technologies Can Work Together to Support Learning.

Computers & Education 54, no. 3 (April): 669-678.

Wythe, Deborah. 2007. New Technologies and the Convergence of Libraries, Archives,

and Museums. *RBM: A Journal of Rare Books, Manuscripts and Cultural*

Heritage. 8, no. 1 (Spring): 51-55.

Appendix A: List of Institutions Studied in the Content Analysis

Art Museum Library	Art Library Website
Art Institute of Chicago	http://www.artic.edu/aic/libraries/
Colonial Williamsburg Foundation	http://research.history.org/JDRLibrary.cfm
Frick Collection	http://www.frick.org/library/
Georgia Museum of Art	http://www.georgiamuseum.org/learn/library
Indiana University Art Museum	http://www.imamuseum.org/art/libraries-resources/stout-reference-library
Isabella Stewart Gardner Museum	http://www.gardnermuseum.org/resources/archives
John and Mable Ringling Museum of Art	http://www.ringling.org/ArtLibrary.aspx?ekmense=c580fa7b_128_130_btnlink
Montgomery Museum of Fine Arts	http://www.mmfa.org/museumInformation.aspx?id=52
National Museum of Wildlife Art	http://www.wildlifeart.org/Library/
New Orleans Museum of Art	N/A
Philadelphia Museum of Art	http://www.philamuseum.org/library/
Portland (Oregon) Museum of Art	http://www.portlandartmuseum.org/education/library/
San Diego Museum of Art	http://www.sdmart.org/education/library-archives
Smithsonian American Art Museum	http://www.sil.si.edu/libraries/aapg/aapg_about.cfm
Spencer Museum of Art	http://www.lib.ku.edu/artlib/coll.shtml
The Menil Collection	http://www.menil.org/collection/Library.php
The Mint Museum	http://www.mintmuseum.org/libraries.html
The Wolfsonian	http://www.wolfsonian.org/collections/c9/index.html
Vero Beach Museum of Art	http://www.verobeachmuseum.org/index.cfm?method=Information_library
Yale Center for British Art	http://britishart.yale.edu/about-us/departments/reference-library-and-archives

Appendix B: Content Analysis Codebook Questions

A. Presentation

1. Does the art museum library have a website?
2. Is the website clearly visible from the museum's home website?
3. Does the website list all library contact information (location, hours, phone number, and email address)?
4. Does the website have a searchable online catalog?
5. If archival materials are included in the collection, does the website searchable have online finding aids?
6. Does the website provide an overview of the scope of the library's collection?

B. Collections

1. How many print volumes are in the library's collection?
2. Does the library have archival materials in its collection?
3. Does the library's website contain digitized images or content?

C. Policies and Procedures

1. Does the library allow the general public to visit its facilities and use its collections?
2. Does the library circulate its collection?
3. Does the website provide explanations of collection use policies, procedures, and/or restrictions?
4. Does the website provide online support to library patrons (such as through email or chat reference)?

5. Does the website include online guides or tutorials to educate patrons on using the collection or doing art historical research?

D. Outreach, Education, and Promotion

1. Does the website advertise for library programs, exhibits, or events?
2. Does the website utilize and link to various forms of social media?
3. Does the website utilize Web 2.0 technologies (such as blogs, wikis, or social folksonomy tagging)?
4. Does the website contain educational outreach materials?